

1 **Q. Please provide your full name, title and business address for the record.**

2 A. Pamela M. Marchand, P.E.
3 Chief Engineer
4 Pawtucket Water Supply Board
5 85 Branch Street
6 Pawtucket, RI 02860

7
8 **Q. How long have you held this position?**

9 A. I was hired on June 24, 1999

10
11 **Q. What are your responsibilities at the PWSB?**

12 A. General Manager of the Pawtucket Water Supply Board which includes water
13 supply, treatment, and distribution systems. The Pawtucket Water Supply Board serves a
14 population of 110,000 in the City of Pawtucket, the City of Central Falls, and the Valley
15 Falls section of the Town of Cumberland.

16
17 **Q. Can you provide a brief description of your previous work experience?**

18 A. From 1987 to 1999 I worked for the Onondaga County Water Authority in Syracuse,
19 NY, as Operations Manager and then Executive Engineer. I was responsible for the
20 operations, management, and engineering of a 45 MGD system that included 1300 miles
21 of water main, 50 water storage tanks, 22 pump stations, and 20 control valves, and a 25
22 MGD filtration plant and watershed, and a purchased water supply.

23
24 **Q. What is your educational background?**

25 A. I have a B.S. and M.S. in Environmental Engineering, an M.S. Certificate in Public
26 Administration from Syracuse University, and an AAS in Chemical Technology from
27 Onondaga County Community College. I am a licensed Professional Engineer in Rhode
28 Island and New York State.

1 **Q. Do you have any professional affiliations?**

2 A. I am Secretary to the Rhode Island Water Works Association, Chair of the Legislative
3 Committee of the RIWWA, Chair of the Softening and Conditioning Committee of the
4 New England Water Works Association, member of the Legislative Committee of the
5 Association of Metropolitan Water Agencies, and a member of the American Water
6 Works Association.

7
8 **Q. What is the purpose of your testimony?**

9 A. To support the Pawtucket Water Supply Board's request for a rate increase to cover
10 operations and maintenance expense, additional debt service coverage, and expenses for
11 the purchase, operations and maintenance of the City of Central Falls water distribution
12 system.

13
14 **Q. What is the amount of the proposed increase?**

15 A. The PWSB is requesting a 22% overall increase in revenues.

16
17 **Q. What does that request consist of?**

18 A. Basically, the increase consists of four different components:

19 1. The PWSB is requesting an increase in rates to fund increases in taxes, medical
20 insurance, the state pension contribution, compensation insurance, property insurance and
21 labor contract increases.

22
23 2. Additionally, part of the rate increase is attributable to the operation costs of the new
24 water treatment plant, based on the contract agreement with Earth Tech and escalation
25 charges contained in the agreement. The new plant is proposed to begin operations in
26 April, 2006.

27
28 3. The PWSB is also requesting an increase in Operations and Maintenance expenses, a
29 portion of which includes bond fees, and an increase in the allowed operating reserve to
30 5% of revenues.

1 4. The fourth component is related to the PWSB's potential purchase of the City of
2 Central Falls Distribution system. A portion of the PWSB's current rates continue to
3 fund the "Central Falls Franchise Fee" restricted account. As the PWSB is no longer
4 paying a franchise fee to Central Falls, we propose to continue funding this account until
5 a purchase price can be agreed upon. At that point, the accumulated funds can be used for
6 the purchase. In addition, the PWSB is requesting an increase in revenues in order to
7 assume the Operation and Maintenance of the Central Falls system.

8
9 **Q. Are there any decreases to any component of the previous docket?**

10 A. Yes, the restricted account for the water treatment plant and pump station repairs and
11 the restricted operation and maintenance reserve required for the bonds are decreased in
12 this filing.

13
14 The restricted account for the water treatment plant repairs and the pump station repairs
15 will no longer be necessary once the new plant is in full operation and the old plant and
16 pump station has been demolished, which is schedule to occur by the end of 2006. Since
17 the funds will need to be available for the entire calendar year, but not at the full amount,
18 the PWSB is requesting a reduction in the rates collected by one-half. This amount,
19 including the existing amount in the restricted account, should be sufficient to cover any
20 required repairs and provide a contribution towards the demolition of the water treatment
21 plant and the Spring St. pump station.

22
23 The amount of funds required for the O&M Reserve account are also reduced in this
24 docket and addressed in the pre-filed testimony of Christopher Woodcock, the PWSB's
25 water rate financial advisor.

26
27 **Q. How is the proposed rate increase to be applied?**

28 A. Mr. Woodcock has prepared a full cost of service and rate design study in accordance
29 with the Commission order in Docket #3497. Please see the testimony and schedules
30 prepared by Mr. Woodcock.

1 **Q. What is the status of the new treatment plant?**

2 A. Treatment plant facilities are under construction at Branch St, Pawtucket. All design
3 documents are out to bid on the design, build, operate (DBO) project, all permits required
4 to date have been completed, the treatment plant concrete floor is being completed and
5 the wall sections have started to be poured. The tank contractor, Natgun, was selected
6 and construction will begin in the late spring. The facilities are scheduled to be in
7 operation in April, 2006.

8
9 **Q. What is the status of the water distribution system renovation project?**

10 A. The PWSB issued a contract for \$5 million for the cleaning and lining of 80,000 feet
11 of water main in 2004. Five streets remain to be completed this spring. The PWSB
12 awarded a contract for \$4.4 million on March 15, 2005, for the cleaning and lining of
13 65,000 feet of main. A water main replacement project is scheduled to be awarded in
14 2006.

15
16 The PWSB is on schedule to issue the last of the Cleaning and Lining program contracts
17 in 2008 as described in the previous docket. The main replacement projects, including
18 Central Falls, are scheduled for completion in 2014. This completion date takes into
19 account the inclusion of Central Falls main replacements in this schedule which increased
20 the replacement time to completion. In addition, the PWSB delayed main replacement
21 projects until 2006 to build up the IFR account for coverage for the bond debt service
22 payments. We also needed more time to build up the IFR since we have not been
23 collecting the full amount allocated in the last docket due to collections at less than
24 predicted in the last docket.

25
26 **Q. What has the Board done with the increases granted in Docket #3497 and**
27 **Docket #3593?**

28 A. The rate increase granted in Docket #3497 became effective on October 4, 2003.
29 That Docket allowed a 21.13% increase for operations and maintenance expense. It
30 included funds to pay for the significant increase in the tangible property taxes paid by
31 the PWSB to the Town of Cumberland; it increased expenses due to the delay in the

1 selection of the water treatment plant vendor; and provided increases to debt service
2 reserve and IFR for the treatment plant and water distribution system renovation projects.
3 Docket 3497 also reduced the amount contributed to restricted Central Falls Franchise
4 Fee Account, and eliminated the payment to the RI Water Resource Board as the required
5 payment was completed during the rate year.

6
7 It should be noted that the PWSB did not collect the full amount of revenue provided for
8 in Docket #3497. The PWSB was authorized to collect rates in the amount of
9 \$13,933,789. The PWSB actually collected \$12,208,140, 12.4% less than allotted in the
10 docket. (See attached schedule PMM1)

11
12 The rate increase granted in Docket #3593 will become effective on April 1, 2005. That
13 increase of 25% provided revenue for debt service on bonds that helped fund the water
14 treatment plant construction, and 2-3 years of funding for the on-going project to clean
15 and line the water distribution system. The bonds also included funds for several source
16 water projects. Bond funds in the amount of \$31,909,000 were issued on 3/22/05 to the
17 RI Clean Water Finance Agency for the PWSB.

18
19 **Q. You indicate that the PWSB did not collect the full amount of revenue provided**
20 **for in Docket #3497, are there reasons for this?**

21 A. Yes, the reasons are twofold. First, projected consumption was overstated in Docket
22 3497. Second, the timing of the increase in Docket 3497 (as in all Dockets) did not allow
23 us to collect sufficient funds to cover all expenses and fund restricted accounts as
24 provided in the docket.

25
26 **Q. In this Docket, the PWSB has based its projected consumption solely on FY04,**
27 **and has not used an average of past years usage. Is there a reason for this?**

28 A, Yes, there is. In preparing this Docket, we have determined that projected
29 consumption in past Dockets has been consistently overstated. For instance, Docket
30 #3497 allowed for revenue in the amount of \$13,933,789 for FY04 based on projected
31 consumption of 5,495,250 HCF.

1 The actual amount collected was \$12,322,963 on actual consumption of 5,087,083 HCF.
2 As a matter of fact, except for calendar year 2002, since 1998 the projected consumption
3 in each docket has been higher than actual consumption. As shown in my attached
4 schedule PMM1, there is a demonstrable downward trend in consumption. Therefore, it
5 is the PWSB's position that averaging consumptions has not provided an accurate
6 forecast in past Dockets, and should not be used in determining an appropriate rate
7 increase in this Docket. The PWSB submits that the FY04 consumption provides the
8 most reliable basis available to project consumption and should be used for calculating
9 rates based for CY06.

10
11 **Q. How did the timing of the increase in Docket 3497 effect the PWSB?**

12 A. The rate year in Docket #3497 was FY04 (July 1, 2003 – June 30, 2004). The order
13 became effective on October 4, 2003, and the majority of the revenues provided for in the
14 increase were not collected until FY05, at which time expenses had increased. However,
15 the Docket 3497 rate year was not based on the FY05, and the increased expenses in that
16 fiscal year, so collections and actual expenses did not coincide. Based on the timing
17 requirements for submitting a rate filing, and final resolution of such filings, this
18 discrepancy occurs in all rate Dockets, and has happened in each of PWSB's rate filings
19 since 1988 as demonstrated in schedule PMM1. This schedule shows that in every docket
20 since 1998, 12.4% to 21.9% less funds were collected than allowed by the docket, with
21 the exception of the Calendar Year 2002. The CY2002 consumption was actually higher
22 than allocated, but collections were lower than allowed by Docket #3378, demonstrating
23 the impact of the timing of the rate increase and the ability to collect the increased
24 revenues in the rate year.

25
26 **Q. Has this “under collection” of allowed revenues had any effect on the PWSB?**

27 A. Yes, it has caused a significant hardship to this utility. First, it has prevented us from
28 fully funding operations and maintenance. Certain maintenance and equipment purchases
29 are routinely put off until the end of the fiscal year, as past experience has taught us that
30 there will not be sufficient income to fully fund the budget. As a result, projects such as
31 watershed brush control, building maintenance, tank painting, fencing, purchase of leak

1 detection equipment, computerized billing program modifications, etc., are reduced or put
2 off year to year.

3
4 **Q. Has the under funding caused any other problems?**

5 A. Yes, there have been problems funding accounts. Under Docket #3497 a restricted
6 account was established for pumping and water treatment repairs (WTP) to be funded by
7 the PWSB until the new water treatment plant was constructed. However, the PWSB's
8 bond indentures set forth a specific order in which accounts are to be funded by
9 collections. The first account to be funded is the O&M budget account, then the Debt
10 Service and O&M Reserve accounts. These accounts must be fully funded in the total
11 amounts allocated. The remaining restricted accounts are funded as a percentage of the
12 revenues collected. These accounts are funded in decreasing order as follows: IFR,
13 Central Falls, WTP Reserve. Therefore, as the last account to be funded, the WTP
14 Reserve account was under-funded in FY04 and FY05, as collections have not allowed
15 for full funding of accounts. (See pre-filed testimony of Robert Benson.)

16
17 **Q. The first component of your rate requests is an increase to fund increases in**
18 **taxes, medical insurance, the state pension contribution, compensation insurance,**
19 **property insurance and labor contract increases. Can you address these increases?**

20 A. Yes. As set forth in the testimony of Mr. Woodcock and Mr. Benson, property taxes
21 have been increased by the maximum allowable 3.5% per year for 2.5 years. It should be
22 noted that The Town of Cumberland is currently performing a complete property
23 revaluation. As part of the Town- wide revaluation, the assessed value of the PWSB's
24 watershed property increased by \$6,549,900, or 45%. The tax rate on the new valuations
25 has yet to be set by the Town of Cumberland.

26 Property insurance has been increased by 10% per year for 1.5 years from the FY2005
27 base. Property insurers for water systems have all but disappeared due to the risk
28 involved in water supply, dams, terrorism, etc. However, the PWSB assumes it will be
29 available at increased rates. The bid for these services should be available before the
30 PUC hearings on the Docket. The exact amount requested can be adjusted at that time.

1 In addition, the City of Pawtucket notified the PWSB of changes to the costs of the health
2 and dental insurance premiums for FY06. These increases were utilized to calculate
3 FY07 expense to determine the estimated expense for CY06.

4
5 Finally, the City also notified the PWSB of the increased expense to Workers
6 Compensation and the State Retirement Fund company contribution. Again, these were
7 calculated with the City provided information for FY06 and applied to FY07 to estimate
8 CY06.

9
10 **Q. What are the costs associated with the contracted labor costs?**

11 A. There are increased salary costs in the FY2005 contract with AFSCME # 1012. That
12 contract will expire on June 30, 2006. The Teamsters contract expires on June 30, 2005,
13 and will be negotiated during the rate filing. The contract salaries and the related
14 increases to payroll taxes have been estimated for CY06 based on previous contracts.

15
16 **Q. Are there any proposed changes to the PWSB's personnel or staffing?**

17 A. Yes. There are several changes from the Test Year. :

- 18 • The position of T&D Crew Leader was included in Docket #3497, but there were
19 not sufficient funds available to fill the position.
- 20 • The PWSB is requesting funds to fill the vacant position of Transmission and
21 Distribution Water Utility Supervisor.
- 22 • The PWSB has added the new position of Chief Financial Officer.
- 23 • The PWSB is requesting funding for positions to operate the Central Falls system
24 as outlined in Mr. Woodcock's and Mr. Benson's testimony and schedules.

25 These changes are addressed further in my testimony as well as the testimony filed by
26 Mr. Woodcock and Mr. Benson.

27
28 **Q. Please address the T&D Crew Leader position.**

29 A. The first vacant position is T&D Crew Leader (Leak Detection). As the Commission
30 will recall, in Docket 3497, the PWSB requested revenues to fund 66 full time

1 employees. The T&D Crew Leader was included as one of these 66 positions. However,
2 the Commission only funded 65 positions.

3
4 Following the issuance of the Docket 3497 Order, the PWSB filed a Motion For Relief
5 From Order. In the Motion, the PWSB asked that the Commission reconsider its decision
6 to funding only 65 positions. The PWSB was concerned that with only revenues for only
7 65 positions, it would not be able to fund the Leak Detection Crew Leader. The Division
8 argued that the Crew Leader position had not been eliminated. It was the Division's
9 position that the funding for the 65 positions could be used in any manner the PWSB
10 sought fit. However, the PWSB Board would not allow 66 positions to be filled if the
11 Commission only allowed funding for 65 positions.

12
13 A second, but more crucial concern was that the PWSB did not have a separate account
14 to pay for temporary labor. The money for temporary help came from the labor fund for
15 each particular department. Therefore, in Docket 3497, the PWSB did not include a rate
16 increase (or any rates at all) to cover the cost of the temporary labor help. It simply asked
17 that the general labor fund not be cut, and that 66 positions be funded.

18
19 The Division was correct that the Leak Detection Crew Leader position was not
20 specifically eliminated. However, the reduction in overall funding did not leave the
21 PWSB with revenues to fund this position and pay for temporary labor. Faced with this
22 dilemma, the PWSB could not afford to fund the Leak Detection Crew Leader position in
23 the PWSB FY05 budget, even if the PWSB Board was to approve the filling of the
24 position.

25
26 The PWSB utilizes temporary help to fill "vacant" positions due to long term illness, to
27 fill in for vacations, or delays in the immediate filling of a vacant position. Temporary
28 help is critical to performing the duties of the PWSB. As a small technical organization,
29 there is little duplication of responsibilities, with few "back-up" persons available to take
30 over additional work loads when a person is absent. For example, until the CFO was
31 hired, the organization depended on only one accountant for all of the financial and daily

1 accounting requirements. Other departments have the similar issues: there are only three
2 meter readers, and only three Customer Service Personnel (one manager, one clerk, one
3 collections). During construction season, the Engineering department is required to
4 restrict vacations. When these persons are absent, only the most critical work is
5 performed. Even with nine Water Utility Workers in the T&D department, with
6 vacations and sick time, staff is reduced to a bare minimum. Should a person be out with
7 a long term illness crews would be short-staffed causing serious safety concerns.
8 Temporary labor is hired to help in these circumstances.

9
10 As such, in this Docket, temporary personnel are listed as a separate expense in this
11 docket, and the PWSB requests revenue to fund the Crew Leader position.

12
13 **Q. Why is the Leak Detection Crew Leader so important?**

14 A. The PWSB is concerned that leaving this position unfilled is not in the best interest of
15 the rate payer. As described in Docket 3497, the Crew Leader (Leak Detection) would
16 coordinate all leak survey work and related distribution system information, perform leak
17 detection, supervise the flushing program and have the flexibility to supervise and work
18 with the other crews on system maintenance as necessary. The Crew Leader position at
19 the PWSB is a working supervisor in the labor union, and as such can perform any and all
20 tasks required within the T&D department. This position is included in the T&D funding
21 tables in Mr. Benson's Schedules.

22
23 **Q. Can you please address the PWSB's request for revenues to fund the position of**
24 **T&D Water Utility Supervisor?**

25 A. Yes. Due to the increased workload with the main renovation projects, and the
26 probable acquisition of the Central Falls distribution system, the PWSB is also requesting
27 funds to fill an existing position of T&D Water Utility Supervisor. This person would be
28 responsible for assisting the T&D Manager, assisting with work assignments, providing
29 materials for the crews, managing documentation, overseeing work performed,
30 overseeing contractors, coordinating with Engineering staff and customers, etc. This
31 position is included in the T&D costs O&M costs.

1 The T&D Water Utility Supervisor position had been left vacant in the attempt to save
2 expenses pending the evaluation and reorganization of the Transmission and Distribution
3 Department. A new Manager was hired in 2004. The existing Water Utility Supervisor
4 is retiring in 2005, and several other persons in the department will most likely retire in
5 2005. The PWSB has taken this opportunity to evaluate the department workload during
6 the water main renovation program and for preventative maintenance plans for the
7 system.

8
9 In order to meet the present and future requirements of the Transmission and Distribution
10 Department, the second T&D Water Utility Supervisor position is required.

11 The water main renovation program will be accelerated over the next three years. A
12 cleaning and lining project and a water main replacement project will be awarded each
13 year. These actually take two years to complete, so there will be four projects under way
14 at any given time. Contractors are not allowed to operate PWSB system valves (state
15 licensing and responsibility requirements.) The T&D department must be available to
16 operate all valves involved in construction. This will require one to three crews at any
17 given time. T&D is also responsible for operating all valves before the project is started
18 and replacing any non-functional valves to insure a tight shut-down. It is the
19 responsibility of the T&D Supervisor to co-ordinate the requirements of the construction
20 projects under the Engineering department and the operation and maintenance
21 requirements of the distribution system. The co-ordination with the construction places a
22 heavy demand on the T&D Supervisor's schedule from February through December.

23
24 The PWSB has been planning to implement several water distribution preventative
25 maintenance projects, but has not had any available manpower. As described in Docket
26 #3497, the PWSB is planning to implement a leak detection program. This program is
27 required by the Department of Health and mandatory to controlling expenses due to lost
28 revenue. Expense on overtime would also be reduced by the amount of time involved is
29 locating a break, especially in the winter. Without proper leak detection equipment, it is
30 very difficult to find a break through deep frost or on a hillside. Often, several pits are
31 dug before a leak is found, wasting overtime labor expense adding to the cost for road

1 restoration. An additional responsibility of the T&D Supervisor would be to manage the
2 leak detection program, should financing for the T&D Crew Leader and equipment be
3 provided.

4
5 The EPA has issued a notice of intent to revise the Total Coliform Rule. This rule
6 provides for the analysis of the distribution system for Total and Fecal Coliform.
7 However, the EPA is focusing on best management practices to control water quality in
8 the distribution system. They are reviewing issues on cross-connection control, aging
9 infrastructure, new or repaired water mains, decay in water quality, and biofilms/bacteria
10 growth. Several preventative maintenance programs that the PWSB plans to implement
11 would address a number of these concerns. With the renovation of the distribution
12 system, it is becoming imperative for the PWSB to implement a more effective reverse-
13 flow flushing program. This program would take much more time and labor, but would
14 provide better water quality to our customers by increasing disinfection contact and
15 removing more deposits that can harbor bacteria. A pressure and fire flow testing
16 program, along with a hydraulic model and testing program would locate restrictions in
17 flow that affect water quality and identify any deterioration of the water system. It is also
18 planned to implement a water quality monitoring program utilizing T&D staff. Basic
19 chemical analysis that can be performed in the field and tracking with a model program
20 can provide significant information on the performance of the distribution system.
21 Therefore, the utilization of the T&D department is a critical function of the PWSB water
22 quality maintenance program. It will be additional responsibility of the T&D Supervisor
23 to coordinate and manage these programs.

24
25 Overall staffing is a major issue in accomplishing these programs. Schedule PMM2 is a
26 list of the available man-hours of the existing staff. With 14 field positions and one
27 supervisory position, work coverage is required for 17,712 hours per year. However,
28 subtracting vacation, sick time, and personal time, the actual hours available are 14,688,
29 or less 1.5 persons available. A staffing chart of the T&D Department is attached as
30 Schedule PMM3. With the possible take over of the Central Falls system (see my
31 testimony below) an additional work crew will be required. Since the Central Falls

1 contract is not concluded at this time, PWSB is requesting that the two vacant T&D
2 positions be filled to manage the present requirements of the department. Should the
3 Central Falls contract be finalized before the end of this docket, the PWSB is requesting
4 the addition of a T&D crew (see my testimony below regarding Central Falls). Once the
5 Central Falls distribution system is renovated sufficiently to be placed in reasonable
6 operable condition, these personnel would be available to provide some assistance to the
7 T&D Department to implement the additional programs discussed above.

8
9 **Q. Has the PWSB added any new positions?**

10 A. Yes. The position of PWSB Chief Financial Officer was added in January 2005. The
11 PWSB found that it could not keep up with the required documentation from the bond
12 indentures, RI Clean Water Finance Agency, RI Water Resource Board, and the PUC and
13 the day to day accounting activities with one accountant. In addition, we felt that in order
14 to properly address the complex financial issues we face, a more experienced and higher
15 level financial accountant was needed. With \$100 million in outstanding bonds, the
16 PWSB found it imperative to hire an experienced CFO. By comparison, when the
17 Pawtucket Public Building Authority (PPBA) provided the bond funds for the PWSB
18 projects, the PWSB paid the PPBA \$81,200 per year to administer \$20 million in bond
19 funds. Now, the PWSB is administering \$100 million in bond funds. The expenses for
20 this position are included in the Administration funding tables.

21
22 **Q. Has the PWSB eliminated any positions?**

23 A. Yes, in the Purification Department. As the Commission knows, Earth Tech took over
24 the operation of the water treatment plant on February 15, 2004. At that time 16 PWSB
25 positions were transferred to Earth Tech. However, the PWSB had created the positions
26 of Source Water Supply Manager and Source Water Supply Technician to manage the
27 watershed and to oversee the Earth Tech operation. These positions were approved in
28 Docket #3378 but not funded until Docket #3497 when the Earth Tech took over
29 treatment operations. These two positions are now listed under the Source of Supply
30 Department, for a net reduction of 14 positions with the take over of operation of the
31 water treatment plant by Earth Tech.

1 **Q. An additional component of the rate increase is attributable to the operation**
2 **costs of the new water treatment plant, based on the Service Agreement with Earth**
3 **Tech and escalation charges included in the agreement. Can you please explain**
4 **these costs?**

5 A. Yes. The Earth Tech operation fee, taxes assigned to the existing plant site, power
6 costs, and additional chemical analysis costs due to changes in law, are included in the
7 Purification Department expenses, per the Earth Tech agreement.

8
9 The operation fee is based on a fixed fee for the term of the contract in January 2002
10 dollars. The fees for the operation of the existing plant and the new plant are separate
11 line items in the contract. The attached PMM4 is a copy of Schedule 11 of the Earth
12 Tech Service Agreement. Schedule 11 of the Agreement describes the service fee and
13 provisions for adjustments to the service fee. PMM5 is a copy of Schedule 17 from the
14 Earth Tech Service Agreement and provides an example of the calculation of the annual
15 service fee escalation based on the Consumer Price Index NE Urban. PMM6 provides
16 the calculation for the O&M fee for March 2005 through February 2006. PMM7, a copy
17 of Schedule 10 of the Agreement, lists the pass-through costs as required by the IRS: the
18 repair and replacement fund is \$100,000 per year for the existing plant only, and the
19 O&M bond is \$15,800 per year.

20
21 The calculations for the rate year include three (3) months of operation of the old plant
22 and nine (9) months of operation of the new plant. The Earth Tech operation fee for
23 CY06 is estimated to be \$1,558,185, based on an estimate of the CPI for February, 2006.
24 Exhibit PMM6 describes the calculations for the operation fee.

25
26 The Earth Tech service agreement calls for Ultra violet (UV) treatment to be added at the
27 water treatment plant. However, Calgon Corporation holds the patent on the process, and
28 is requiring a patent fee of \$0.015 per one thousand gallons treated. This fee is still in
29 litigation, but should be resolved this year. I understand it is likely that the decision will
30 favor Calgon. Therefore this fee of \$72,818 is incorporated in the expenses for the rate

1 year. Also, per service agreement, the PWSB is responsible for additional power costs,
2 up to 78,840 Kwh per year. These costs are included in the line item for power expense.

3
4 Earth Tech is not responsible for any additional costs as a result in a change of law per
5 the Service Agreement, as these would be unforeseen costs. By the end of this year, two
6 new laws will be finalized: the Stage 2 Disinfection By-Product Rule (DBR2) and the
7 Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR). The DBR2 will
8 require additional monitoring in the distribution system and will change the manner in
9 which the limits are measured from an average of all samples to a running average of
10 individual samples. Sample sites for analysis are required to be based on the highest
11 levels found in the system. This will require extensive testing of disinfection by-products
12 to meet the parameters of the program. The LT2ESWTR will require 2 years of
13 monitoring for Cryptosporidium and additional treatment for Crypto. (The technology
14 identified by the EPA as best treatment for Crypto inactivation is UV). Therefore,
15 \$10,000 in expenses have been added to the Rate Year for the additional testing
16 requirements.

17
18 **Q. Please describe the component on operations and maintenance expense**
19 **requested in this docket.**

20 A. Most of the O&M expenses are standard annual costs. The actual test year (FY04)
21 costs, when appropriate, were increased by the FY04 inflation rate (CPI-NE) of 3.5% for
22 2.5 years to calculate the rate year expense. Power costs were increased by 7.0% for 2.5
23 years per the testimony of financial consultant Mr. Woodcock and Mr. Benson.

24
25 Significant changes in O&M costs were listed in the schedules of Mr. Woodcock and
26 Mr. Benson. For example, the PWSB is requesting an increase on \$71,806 for regulatory
27 expense based on the test year expenses, estimated rate case fees, and increases in the
28 PUC annual fee.

29
30 The Source of Supply department includes costs for brush clearing in the watershed,
31 dams, and tank sites. Tree and brush clearing of particular facilities was required by the

1 Department of Health and recommended in the EPA Vulnerability Assessment.
2 However, as set forth previously in my testimony, the PWSB did not have the funds to
3 clear-cut these areas. The RI Water Resources Board agreed to fund these projects from
4 the surcharge funds, one time, on the condition that the PWSB agree to maintain these
5 areas. Therefore, the brush control program has been increased from \$50,000 annually to
6 \$100,000. (See Schedule PMM8).

7
8 The Transmission and Distribution Department has requested to purchase a road saw
9 suitable to cut asphalt and concrete. This work has been contracted in the past. The
10 T&D department has estimated that the cost of the contractor could be recovered within
11 two years, and would increase the efficiency of the work performed by the crew by
12 reducing delays. This would be an added cost to O&M but a reduction in IFR payments.
13 The cost of the contractor to perform the road cuts has been included in the road
14 restoration contract, which has previously been paid from the IFR fund

15
16 The PWSB is again requesting \$20,000 in funds to purchase a leak detection system.
17 This was requested and granted in Docket #3497. However, as discussed previously,
18 insufficient funds were collected from rates to support the cost of the system, and it was
19 not purchased.

20
21 The PWSB has been assessed a payment of \$16,000 for CY06 towards first phase of a
22 citywide computerized Geographical Information System (GIS) being developed by the
23 City of Pawtucket. This will be an ongoing project for the next several years, and all
24 departments involved in the project are sharing the cost. The PWSB will have all facility
25 information added to the program and will be a substantial user of the system.

26
27 **Q. You indicated above that the requested rate increase consists of a component for**
28 **O&M that included an increase in operating reserve, can you explain this request?**

29 A. Yes. As set forth previously in my testimony, the PWSB has collected insufficient
30 funds in the past to support the reasonable expenses approved by the Commission in past
31 Dockets. Please see Schedule PMM1. This Schedule identifies the Dockets since 1998,

1 listing the approved revenues to be collected in the rate year, and the actual amounts
2 collected. It also lists the consumption (in HCF) that formed the basis for the rates to be
3 collected. For every docket, except the one based on the rate year Calendar Year 2002
4 consumptions have been less than stated and collections have been considerably less than
5 authorized to meet expenses. In fact actual collections have been between 12.4% and
6 21.9% less than those approved. Even in CY2002, when consumption was slightly
7 higher than stated in Docket #3378, revenues were less than approved due to the delay in
8 the collection of the approved rate increase.

9
10 The PUC typically has allowed an Operating Reserve Allowance to account for any
11 disparity in expenses, consumptions, and collections. This amount was in the range of
12 1.46 to 1.48% of the total revenues. However, in Docket #3497, the PWSB was provided
13 an Operating Reserve of only 0.86%, or \$120,059 while the deficit from the approved
14 collections for FY04 was \$1,610,826.

15
16 **Q. Will there be any negative effect if the PWSB continues to under collect without**
17 **the reserve it is requesting?**

18 A. Yes. The PWSB has several concerns about being able to properly fund its various
19 accounts. First, the PWSB 's bond indentures have certain requirements as to the funding
20 of accounts The indentures require that the O&M budget, Debt Service fund and O&M
21 Reserve fund be fully funded Only after these accounts have been fully funded, can the
22 remaining restricted accounts, such as the Central Falls and IFR account, be funded.

23
24 However, if the PWSB continues to be under-funded for required expenses, and accounts
25 are funded in the order established by the bond indentures, the Central Falls restricted
26 account will not be funded, resulting in a delay in purchasing the system. The next fund
27 to be curtailed will be the IFR restricted account, which will again delay water main
28 replacement projects. . In the future, cutting maintenance will not be an option when
29 collections are lower than expected.

1 Therefore, considering all these issues, the PWSB fervently requests that the Public
2 Utilities Commission approve a 5% Operating Reserve allowance on the total revenues
3 allowed in this docket.
4

5 **Q. The last component of the increase in expense is for the operation and**
6 **maintenance of the Central Falls water system. What is the status of the PWSB**
7 **purchase of the Central Falls Distribution system?**

8 A. As the Commission knows, the issue of the PWSB purchasing and taking over the
9 operation and maintenance of the City of Central Falls Water Distribution system has
10 been discussed in various Dockets since 1988. The City of Pawtucket and the City of
11 Central Falls had a contract agreement for the sale of water to the residents of Central
12 Falls dating from 1938. The agreement stipulated that the City of Pawtucket paid the
13 City of Central Falls twenty-five percent (25%) of the gross amount of all water sales
14 collected within Central Falls.
15

16 The Commission will recall that the Pawtucket Water terminated this contract, stopped
17 paying franchise fees, and litigation ensued over the termination and cancelled payments.
18 This litigation was ultimately reached during the course of Docket No. 3378. Pursuant to
19 the terms of the settlement, the PWSB and the City of Central Falls agreed that the
20 contract was terminated as of May 1, 2002. In addition, certain monetary disputes
21 between the parties were settled, and the PWSB agreed to pay franchise fees due to
22 Central Falls for 2001 and 2002. Thereafter, no franchise fees were to be paid to Central
23 Falls.
24

25 The PWSB has been seeking to purchase the Central Falls water distribution system in
26 order to take control of its operation and maintenance. The Central Falls system is fully
27 interlinked with the PWSB's distribution systems in Pawtucket and Valley Falls,
28 Cumberland. The PWSB has undertaken a major renovation of the water distribution
29 pipes in Pawtucket and Cumberland to eliminate water quality problems. In the past,
30 Central Falls has done little maintenance on its distribution system, resulting in water
31 quality issues in Pawtucket and Valley Falls. With the construction of a new water

1 treatment plant and anticipated completion of the distribution pipe renovation program in
2 2014, the PWSB intends to change the chemical treatment to lower the levels of
3 disinfection by-products in the distribution system. The condition of the Central Falls
4 system will prevent the change in treatment unless the system is renovated or separated.

5
6 Separation of the systems is not impossible but it would prove to be quite difficult and
7 costly. Furthermore, it will result in additional water quality issues due to dead ends in
8 Pawtucket and Central Falls. Fire flows would also be significantly reduced in all
9 systems. It would be most advantageous to all PWSB customers to acquire the Central
10 Falls system, perform the necessary renovations in conjunction with the Pawtucket and
11 Valley Falls systems, and operate and maintain the entire system under one central
12 program.

13
14 **Q. Has there been any progress made since the conclusion of Docket 3497?**

15 A. Yes. As the Commission also knows, there is a new administration in the City of
16 Central Falls led by Mayor Charles D. Moreau. Shortly after Mayor Moreau took office,
17 discussions about the unification of the Pawtucket and Central Falls distribution systems
18 began once again. In stark contrast to past dealings, and under Mayor Moreau's
19 leadership, the renewed negotiations have been fruitful. On February 28, 2005, the
20 Central Falls City Council authorized the sale of its distribution system to the Pawtucket
21 Water Supply Board/City of Pawtucket. The offer contained two purchase scenarios: (1)
22 A sale for \$1.2 million dollars with equal payments of \$500,000 to be made in 2005 and
23 2006, and (2) A sale for \$1 million dollars, provided the sale can take place in 2005.

24
25 It is our hope that this offer will form a basis for further negotiations and an eventual sale.
26 As this proposal is far more reasonable than previous demands made by Central Falls,
27 and given the new leadership of Mayor Moreau, it is the PWSB's sincere hope that
28 negotiations will be concluded by the time hearings are held for this Docket. Therefore,
29 funds for the purchase of the system and for operations & maintenance of the Central
30 Falls system are requested in this docket.

1 **Q. How is the PWSB proposing to fund the purchase of the Central Falls System?**

2 A. The necessary funds can come from two sources. First, the EPA has provided a grant
3 in the amount of \$520,400 to apply toward purchasing the Central Falls system. This is a
4 matching grant where the PWSB has to put up a 45% of the funds. The PWSB has also
5 continued collecting funds for payment of past due franchise fees owed to Central Falls.
6 The final payment of the 2001 and 2003 franchise fees, as referenced above in my
7 testimony, was made in FY04, and pursuant to the Order in Docket 3497, the PWSB has
8 continued collecting \$172,832 annually. These funds are in a restricted account, and can
9 be applied to the purchase of the Central Falls system. Should the agreement be
10 concluded with Central Falls by the end of this docket, the purchase could take place in
11 July 2006. By that time, the PWSB estimates that up to \$550,000 will be collected in the
12 restricted account to provide matching funds towards the purchase. Depending on the
13 final agreement, this amount may be sufficient, or at least within a workable range of the
14 agreed purchase price by the end of CY06.

15
16 **Q. What are some of the issues the PWSB anticipates it will face when it takes over**
17 **the Central Falls system?**

18 A. The City of Central Falls distribution system has 20 miles of water main. Based on
19 documentation obtained by the PWSB, 11 miles of main will be replaced and about 2
20 miles will be cleaned and lined. All associated valves and hydrants will be replaced for
21 an estimated cost of \$9.4 million over the next eight years. This amount is included in
22 the PWSB CIP program. At present, the PWSB has obtained a second matching grant
23 from the EPA in the amount of \$440,000 for system renovation in Central Falls.

24
25 The 2006 target date will allow the PWSB to hire additional staff and purchase
26 equipment to perform the operation and maintenance of the system. This will start with a
27 physical inspection of the system to determine whether there are any non-operational
28 valves and hydrants. This is accomplished by performing "test shut-downs" on every
29 street by opening a hydrant and closing valves until flow stops. Then all other system
30 valves would be operated to try and determine those that are not working. The next step
31 would be to develop a schedule for replacement of the most critical valves and the non-

1 performing hydrants. Then the T&D department would work with engineering to
2 determine a schedule for main replacements. All the non-operational valves required for
3 the projects would need to be replaced before project construction is started.

4
5 Eventually, all non-copper services will need to be replaced. Also, in the past, when
6 some of the newer mains were installed in Central Falls, services from the old main were
7 not transferred, leaving the old main in operation. The T&D department will look to
8 transfer these services and retire the older mains. The large mill complexes will present a
9 challenge. There were private mains run through large complexes. As the mills left, the
10 complexes were broken up and sold. It is almost impossible to shut down water to these
11 areas, and will require significant work to locate mains and install valves that in many
12 cases have no documentation.

13
14 **Q. What are the Operation and Maintenance expenses associated with the Central**
15 **Falls system?**

16 The estimated cost to operate and maintain the Central Falls system will be the additional
17 O&M costs to the Transmission and Distribution department and the vehicle lease
18 program, as the PWSB presently includes the costs of meters, reading, billing and
19 collection in existing rates. The estimated cost is \$399,097 for O&M which includes the
20 cost of one full crew and materials and a \$28,163 lease payment for a crew vehicle based
21 on CY06 costs. (See pre-testimony of Mr. Woodcock and Mr. Benson for cost
22 breakdowns.) These increased costs are roughly equivalent to the franchiser fee the
23 PWSB would have paid to Central Falls in FY03 (\$413,390) and FY04 (\$425,372), if the
24 Franchise Agreement were still in effect.

25
26 Due to the condition of the system, the PWSB is planning to utilize one crew with the
27 assistance of a second crew, when available, for at least the first three years of operation.
28 As described in the previous section requesting funding for the vacant T&D Supervisor
29 position, the T&D department staffing is not sufficient to fulfill the current system
30 maintenance requirements during the escalated construction programs and planned
31 maintenance programs in the next five years. With the addition of the Central Falls

1 maintenance requirements, the PWSB would be unable to provide basic maintenance to
2 the existing PWSB system and the Central Falls system without the addition of a full
3 crew.

4
5 However, once sufficient system valves, hydrants and services have been repaired and
6 replaced to provide functional control of the Central Falls system, it is anticipated that a
7 full time crew will be no longer be required. That crew will then be reassigned, at least
8 part-time, to other projects that have not been implemented due to lack of manpower.
9 These projects include: leak detection, reverse-flow flushing program, pressure and fire
10 flow testing program, hydraulic model and testing program, water quality monitoring
11 program, etc. As such, once the Central Falls system renovation is well underway, the
12 PWSB could finally implement planned distribution system preventative maintenance
13 programs.

14
15 **Q. What is the status of the Town of Cumberland Tangible Tax?**

16 A. The situation has not changed since this was discussed in Docket #3497. The PWSB
17 has challenged the tax every year, and each year has been denied. Each claim has been
18 forwarded to Superior Court.

19
20 **Q. If the claims are still pending in Superior Court, why is the PWSB requesting a
21 surcharge again in this Docket?**

22 A. Mr. Woodcock has addressed the reasoning behind this surcharge more fully in his
23 testimony, and I will supplement the reasoning herein. Unfortunately, the dispute over the
24 surcharge focused on whether the assessed value of the PWSB's tangible property in
25 Cumberland was proper. As the Commission knows, there were significant discovery
26 disputes between the PWSB and Cumberland, and the battles over discovery and the
27 Town of Cumberland's participation obscured the real issues.

28
29 The PWSB is not asking the Commission to rule whether the assessed value of its
30 tangible property in Cumberland is proper. Issues concerning the proper valuation will be
31 settled by the Providence Superior Court. In addition, the PWSB is not asking the

1 Commission to determine whether the tax itself is proper. The PWSB does not dispute
2 that the Town of Cumberland may tax tangible property if the tax is based on a fair and
3 legal valuation. If the Town of Cumberland's assessed valuation of the PWSB's tangible
4 property were legal, the PWSB would likely have no grounds, or reason, to challenge the
5 tax. The tax itself is the real issue at hand.

6
7 No matter how the Providence Superior Court rules on the *valuation* used by
8 Cumberland, the *tax itself* will always exist, unless Cumberland stops the taxation
9 altogether. Therefore, as long as Cumberland continues to charge this tax, there will be a
10 difference in the cost of service at the point of delivery in Cumberland. This differential
11 is a factor in ratemaking. The amount of the tax may change based on the amount of the
12 assessed value, and therefore, the amount of the tax, but the tax itself will continue to
13 exist, thus creating an increased cost of service based on geographical boundaries.

14
15 This tangible tax is largely based on Cumberland's assessed value of the PWSB's pipes
16 that serve ONLY the residents of the Valley Falls section of the Town of Cumberland.
17 These pipes do not serve any other customers of the PWSB. No other pipes serving
18 customers of the PWSB are taxed. Therefore, it is an unfair burden to the PWSB rate
19 payers outside the Town of Cumberland to pay this tax to the Town.

20
21 As all PWSB rate payers benefit from the source of supply, watershed property, and
22 treatment facilities, it is appropriate that all ratepayers pay the tax associated with these
23 properties and facilities. However, it is NOT appropriate for all rate payers to pay the tax
24 on facilities that serve only a small segment of the PWSB customers

25
26 Therefore, these funds are included as a surcharge to the Town of Cumberland customers.
27 Please see CPNW Schedule 12 of Mr. Woodcock's testimony.

28
29 **Q. Does this conclude your testimony?**

30 A. Yes.

Pawtucket Water Supply Board
Rate filings with RIPUC

Docket	Effective	Rate Year	% Inc	Increase	Total	Ave Rsd Cust.	Rate Basis, HCF			Actual, HCF			Collections\$			% Diff	O&M Allowance
							Retail	Wholesale	Total	Retail	Wholesale	Total	% diff	Actual	\$ +/-		
															RY vs. Act		
2674	17-Jul-98	FY99	7.5%	\$614,430	\$8,792,075	\$139.51	6,472,448	708,612	7,181,060	5,646,165	668,024	6,314,189	-12.07%	\$7,511,334	-\$1,280,741	-14.57%	\$128,781
3164	1-Nov-00	FY2000	22.1%	\$1,820,799	\$10,050,085	\$173.58	5,727,668	552,820	6,280,488	5,758,813	443,893	6,202,706	-1.24%	\$7,858,192	-\$2,191,893	-21.81%	\$148,523
3378	1-Apr-02	CY2002	29.9%	\$2,732,584	\$11,870,199	\$225.72	5,143,144	554,153	5,697,297	5,154,046	793,227	5,947,273	4.39%	\$10,999,938	-\$870,261	-7.33%	\$175,422
3497	4-Oct-04	FY04	21.1%	\$2,383,375	\$13,933,789	\$273.41	4,864,720	630,530	5,495,250	4,538,921	548,162	5,087,083	-7.43%	\$12,208,140	-\$1,725,649	-12.38%	\$120,059
3593	1-Apr-05	FY06	25.0%	\$3,413,736	\$17,074,843	\$341.74	4,864,720	630,530	5,495,250								\$120,059

Actual Consumptions, HCF

<u>FY</u>	<u>Retail</u>	<u>Wholesale</u>	<u>Total</u>	<u>Decrease %</u>	<u>Collections\$</u>
1999	5,646,165	668,024	6,314,189		\$7,511,334
2000	5,758,813	443,893	6,202,706	1.80%	\$7,858,192
2001	5,443,371	741,077	6,184,448	0.30%	\$9,005,540
2002	4,864,720	845,377	5,710,097	8.31%	\$9,562,809
2003	5,042,979	545,224	5,588,203	2.18%	\$11,457,331
2004	4,538,921	548,162	5,087,083	9.85%	\$12,322,963

Proposed T D Organization Chart

PMM 3

